

SEQUENCE LISTING

<110> Boehringer Ingelheim Pharma KG

<120> Methods for identifying substances for treating
inflammatory conditions

<130> 1/1178

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<150> US 60/257,878

<151> 2000-12-22

<160> 20

<170> PatentIn Ver. 2.1

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| Tyr | Ile | Leu | Leu | Thr | Gly | Ala | Leu | Gln | Phe | Gly | Tyr | Cys | Leu | Leu | Val |
| | | 35 | | | | | | 40 | | | | 45 | | | |
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| Gly | Thr | Phe | Pro | Phe | Asn | Ser | Phe | Leu | Ser | Gly | Phe | Ile | Ser | Cys | Val |
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| Gly | Ser | Phe | Ile | Leu | Ala | Val | Cys | Leu | Arg | Ile | Gln | Ile | Asn | Pro | Gln |
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| Asn | Lys | Ala | Asp | Phe | Gln | Gly | Ile | Ser | Pro | Glu | Arg | Ala | Phe | Ala | Asp |
| | | | 85 | | | | | 90 | | | | | 95 | | |
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| Phe | Leu | Phe | Ala | Ser | Thr | Ile | Leu | His | Leu | Val | Val | Met | Asn | Phe | Val |
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Thr Glu Leu His Lys Ile Thr Arg Ile Ser Glu Asn Gln Gly Val Pro
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Cys Leu Ile Leu Leu Asp Val Asn Pro Lys Phe Leu Lys Asn Ala Gly
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Arg Asp Cys Ser Arg Arg Ser Ser Pro Val Tyr Val Gly Arg Val Gly
 210 215 220

Ser Gly Met Val Asn Cys Asn Asp Asp Gln Gly Val Leu Leu Gly Arg
 225 230 235 240

Trp Asp Asn Asn Tyr Gly Asp Gly Val Ser Pro Met Ser Trp Ile Gly
245 250 255

Ser Val Asp Ile Leu Arg Arg Trp Lys Asn His Gly Cys Gln Arg Val
260 265 270

Lys Tyr Gly Gln Cys Trp Val Phe Ala Ala Val Ala Cys Thr Val Leu
275 280 285

Arg Cys Leu Gly Ile Pro Thr Arg Val Val Thr Asn Tyr Asn Ser Ala
290 295 300

His Asp Gln Asn Ser Asn Leu Leu Ile Glu Tyr Phe Arg Asn Glu Phe
305 310 315 320

Gly Glu Ile Gln Gly Asp Lys Ser Glu Met Ile Trp Asn Phe His Cys
325 330 335

Trp Val Glu Ser Trp Met Thr Arg Pro Asp Leu Gln Pro Gly Tyr Glu
340 345 350

Gly Trp Gln Ala Leu Asp Pro Thr Pro Gln Glu Lys Ser Glu Gly Thr
355 360 365

Tyr Cys Cys Gly Pro Val Pro Val Arg Ala Ile Lys Glu Gly Asp Leu
370 375 380

Ser Thr Lys Tyr Asp Ala Pro Phe Val Phe Ala Glu Val Asn Ala Asp
385 390 395 400

Val Val Asp Trp Ile Gln Gln Asp Asp Gly Ser Val His Lys Ser Ile
405 410 415

Asn Arg Ser Leu Ile Val Gly Leu Lys Ile Ser Thr Lys Ser Val Gly
420 425 430

Arg Asp Glu Arg Glu Asp Ile Thr His Thr Tyr Lys Tyr Pro Glu Gly

| | | |
|---|-----|---------|
| 435 | 440 | 445 |
| Ser Ser Glu Glu Arg Glu Ala Phe Thr Arg Ala Asn His Leu Asn Lys | | |
| 450 | 455 | 460 |
| Leu Ala Glu Lys Glu Glu Thr Gly Met Ala Met Arg Ile Arg Val Gly | | |
| 465 | 470 | 475 480 |
| Gln Ser Met Asn Met Gly Ser Asp Phe Asp Val Phe Ala His Ile Thr | | |
| 485 | 490 | 495 |
| Asn Asn Thr Ala Glu Glu Tyr Val Cys Arg Leu Leu Leu Cys Ala Arg | | |
| 500 | 505 | 510 |
| Thr Val Ser Tyr Asn Gly Ile Leu Gly Pro Glu Cys Gly Thr Lys Tyr | | |
| 515 | 520 | 525 |
| Leu Leu Asn Leu Thr Leu Glu Pro Phe Ser Glu Lys Ser Val Pro Leu | | |
| 530 | 535 | 540 |
| Cys Ile Leu Tyr Glu Lys Tyr Arg Asp Cys Leu Thr Glu Ser Asn Leu | | |
| 545 | 550 | 555 560 |
| Ile Lys Val Arg Ala Leu Leu Val Glu Pro Val Ile Asn Ser Tyr Leu | | |
| 565 | 570 | 575 |
| Leu Ala Glu Arg Asp Leu Tyr Leu Glu Asn Pro Glu Ile Lys Ile Arg | | |
| 580 | 585 | 590 |
| Ile Leu Gly Glu Pro Lys Gln Lys Arg Lys Leu Val Ala Glu Val Ser | | |
| 595 | 600 | 605 |
| Leu Gln Asn Pro Leu Pro Val Ala Leu Glu Gly Cys Thr Phe Thr Val | | |
| 610 | 615 | 620 |
| Glu Gly Ala Gly Leu Thr Glu Glu Gln Lys Thr Val Glu Ile Pro Asp | | |
| 625 | 630 | 635 640 |

Pro Val Glu Ala Gly Glu Glu Val Lys Val Arg Met Asp Leu Val Pro
645 650 655

Leu His Met Gly Leu His Lys Leu Val Val Asn Phe Glu Ser Asp Lys
660 665 670

Leu Lys Ala Val Lys Gly Phe Arg Asn Val Ile Ile Gly Pro Ala
675 680 685

<210> 11
<211> 1470
<212> DNA
<213> Homo sapiens

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aggagataag ttggagacga tgcccctcta cttggaagac gacattcgcc ctgatataaa 360
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<210> 12

<211> 359

<212> PRT

<213> Homo sapiens

<400> 12

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Met | Pro | Ala | His | Leu | Leu | Gln | Asp | Asp | Ile | Ser | Ser | Ser | Tyr | Thr | Thr |
| 1 | | | | 5 | | | | | 10 | | | | | 15 | |
| Thr | Thr | Thr | Ile | Thr | Ala | Pro | Pro | Pro | Gly | Val | Leu | Gln | Asn | Gly | Gly |
| | | | 20 | | | | | 25 | | | | | 30 | | |
| Asp | Lys | Leu | Glu | Thr | Met | Pro | Leu | Tyr | Leu | Glu | Asp | Asp | Ile | Arg | Pro |
| | 35 | | | | | | 40 | | | | | 45 | | | |
| Asp | Ile | Lys | Asp | Asp | Ile | Tyr | Asp | Pro | Thr | Tyr | Lys | Asp | Lys | Glu | Gly |
| | 50 | | | | | 55 | | | | | 60 | | | | |
| Pro | Ser | Pro | Lys | Val | Glu | Tyr | Val | Trp | Arg | Asn | Ile | Ile | Leu | Met | Ser |
| 65 | | | | 70 | | | | | 75 | | | | | 80 | |
| Leu | Leu | His | Leu | Gly | Ala | Leu | Tyr | Gly | Ile | Thr | Leu | Ile | Pro | Thr | Cys |
| | | | 85 | | | | | | 90 | | | | | 95 | |
| Lys | Phe | Tyr | Thr | Trp | Leu | Trp | Gly | Val | Phe | Tyr | Tyr | Phe | Val | Ser | Ala |
| | 100 | | | | | | 105 | | | | | | 110 | | |
| Leu | Gly | Ile | Thr | Ala | Gly | Ala | His | Arg | Leu | Trp | Ser | His | Arg | Ser | Tyr |
| | 115 | | | | | | 120 | | | | | 125 | | | |
| Lys | Ala | Arg | Leu | Pro | Leu | Arg | Leu | Phe | Leu | Ile | Ile | Ala | Asn | Thr | Met |
| | 130 | | | | | 135 | | | | | 140 | | | | |

Ala Phe Gln Asn Asp Val Tyr Glu Trp Ala Arg Asp His Arg Ala His
145 150 155 160

His Lys Phe Ser Glu Thr His Ala Asp Pro His Asn Ser Arg Arg Gly
165 170 175

Phe Phe Phe Ser His Val Gly Trp Leu Leu Val Arg Lys His Pro Ala
180 185 190

Val Lys Glu Lys Gly Ser Thr Leu Asp Leu Ser Asp Leu Glu Ala Glu
195 200 205

Lys Leu Val Met Phe Gln Arg Arg Tyr Tyr Lys Pro Gly Leu Leu Met
210 215 220

Met Cys Phe Ile Leu Pro Thr Leu Val Pro Trp Tyr Phe Trp Gly Glu
225 230 235 240

Thr Phe Gln Asn Ser Val Phe Val Ala Thr Phe Leu Arg Tyr Ala Val
245 250 255

Val Leu Asn Ala Thr Trp Leu Val Asn Ser Ala Ala His Leu Phe Gly
260 265 270

Tyr Arg Pro Tyr Asp Lys Asn Ile Ser Pro Arg Glu Asn Ile Leu Val
275 280 285

Ser Leu Gly Ala Val Gly Glu Gly Phe His Asn Tyr His His Ser Phe
290 295 300

Pro Tyr Asp Tyr Ser Ala Ser Glu Tyr Arg Trp His Ile Asn Phe Asn
305 310 315 320

Thr Phe Phe Ile Asp Trp Met Ala Ala Leu Gly Leu Thr Tyr Asp Arg
325 330 335

Lys Lys Val Ser Lys Ala Ala Ile Leu Ala Arg Ile Lys Arg Thr Gly

Asp Gly Asn Tyr Lys Ser Gly

355

<210> 13

<211> 1637

<212> DNA

<213> Homo sapiens

<400> 13

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cgcaggccct gcccgccctt tccgtcccca ccccccctcg ccttttcctc tccccacctt 180
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<210> 14
<211> 394
<212> PRT
<213> Homo sapiens

<400> 14
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Thr Arg Leu His Leu Asn Lys Lys Ala Thr Asp Lys Gln Pro Tyr Ser
35 40 45
Lys Leu Pro Gly Val Ser Leu Leu Lys Pro Leu Lys Gly Val Asp Pro
50 55 60
Asn Leu Ile Asn Asn Leu Glu Thr Phe Phe Glu Leu Asp Tyr Pro Lys
65 70 75 80
Tyr Glu Val Leu Leu Cys Val Gln Asp His Asp Asp Pro Ala Ile Asp
85 90 95
Val Cys Lys Lys Leu Leu Gly Lys Tyr Pro Asn Val Asp Ala Arg Leu
100 105 110
Phe Ile Gly Gly Lys Lys Val Gly Ile Asn Pro Lys Ile Asn Asn Leu
115 120 125
Met Pro Gly Tyr Glu Val Ala Lys Tyr Asp Leu Ile Trp Ile Cys Asp
130 135 140

Ser Gly Ile Arg Val Ile Pro Asp Thr Leu Thr Asp Met Val Asn Gln
 145 150 155 160
 Met Thr Glu Lys Val Gly Leu Val His Gly Leu Pro Tyr Val Ala Asp
 165 170 175
 Arg Gln Gly Phe Ala Ala Thr Leu Glu Gln Val Tyr Phe Gly Thr Ser
 180 185 190
 His Pro Arg Tyr Tyr Ile Ser Ala Asn Val Thr Gly Phe Lys Cys Val
 195 200 205
 Thr Gly Met Ser Cys Leu Met Arg Lys Asp Val Leu Asp Gln Ala Gly
 210 215 220
 Gly Leu Ile Ala Phe Ala Gln Tyr Ile Ala Glu Asp Tyr Phe Met Ala
 225 230 235 240
 Lys Ala Ile Ala Asp Arg Gly Trp Arg Phe Ala Met Ser Thr Gln Val
 245 250 255
 Ala Met Gln Asn Ser Gly Ser Tyr Ser Ile Ser Gln Phe Gln Ser Arg
 260 265 270
 Met Ile Arg Trp Thr Lys Leu Arg Ile Asn Met Leu Pro Ala Thr Ile
 275 280 285
 Ile Cys Glu Pro Ile Ser Glu Cys Phe Val Ala Ser Leu Ile Ile Gly
 290 295 300
 Trp Ala Ala His His Val Phe Arg Trp Asp Ile Met Val Phe Phe Met
 305 310 315 320
 Cys His Cys Leu Ala Trp Phe Ile Phe Asp Tyr Ile Gln Leu Arg Gly
 325 330 335
 Val Gln Gly Gly Thr Leu Cys Phe Ser Lys Leu Asp Tyr Ala Val Ala
 340 345 350

Trp Phe Ile Arg Glu Ser Met Thr Ile Tyr Ile Phe Leu Ser Ala Leu
355 360 365

Trp Asp Pro Thr Ile Ser Trp Arg Thr Gly Arg Tyr Arg Leu Arg Cys
370 375 380

Gly Gly Thr Ala Glu Glu Ile Leu Asp Val
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<210> 15

<211> 63

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

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<210> 16

<211> 25

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 16

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<210> 17

<211> 51

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 17

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<210> 18

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 18

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<210> 19

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 19

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32

<210> 20

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Primer

<400> 20

ttaagcttcc atcttttctt tttctgttgc c
31